IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Mark J. Flanagan　　　　　Atty Dkt No.: 2001P18375US
Serial No.: 09/742,696　　　　　　　　Examiner: T. J. ROCHE
Filed: January 9, 2002　　　　　　　　Art Unit: 2124
For: INTERACTIVE COLLABORATIVE
　　　FACILITY FOR INSPECTION AND
　　　REVIEW OF SOFTWARE PRODUCTS...

DECLARATION UNDER 37 C.F.R. §1.131

Mail Stop **AMENDMENT**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I hereby certify that this Correspondence is being deposited with the United States Postal service with sufficient postage for first class mail in an envelope address to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:
Date of Deposit: **Sept. 13, 2005**

Typed Name: 　　　**Francis G. Montgomery** .

Signature: _Francis Montgomery_

Sir:

I, Mark J. Flanagan, inventor for the invention claimed in the above referenced patent application, declare as follows:

Sometime prior to December 1, 2001, I conceived and reduced to practice:
a review facility for providing an item, such as a document (e.g., source code), for review by a
plurality of reviewers, e.g., in a development group, and collecting comments from reviewers,
a method of reviewing items in the review facility,
and a program product embodying the review facility;

My review facility included:

preparation means for preparing an item for interactive review,

means for collecting comments on elements (e.g., lines in the document) of prepared items; and

means for distributing collected comments from review;

The review facility also included means for making prepared items available for interactive collaborative review;

The review facility identifies individual elements within an item with reviewers providing comments on individual elements;

Particular individual elements may be block of text, e.g., individual lines of said source code;

Sometime prior to December 1, 2001, my invention was reduced to practice and memorialized in an MSWord file, a hardcopy of which is attached hereto and marked Exhibit A;

Sometime prior to December 1, 2001, I printed the contents of the MSWord file and submitted it as Siemens Corporation Invention Disclosure, a copy of the cover page, the first and last pages of which are attached hereto, the conception date and personal information having been redacted as indicated and marked Exhibit B;

On January 9, 2002, the present patent application was filed embodying my invention;

All acts, including conception and reduction to practice, occurred in the United States;

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and

I further declare that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor: Mark J. Flanagan

Signature: _____
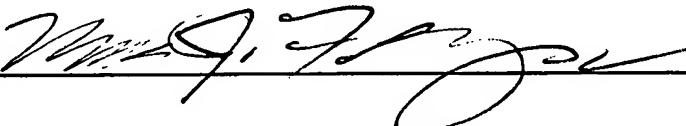
_____9/9/2005_____ Date

Residence: 8735 Indian River Run
               Boynton Beach, FL 33437
Citizenship: U.S.

Post Office Address: Same as above

Invention Disclosure Form Supplement

1. <u>Title</u>:   WebReview

2. <u>Abstract</u>:

   WebReview provides for inspection and review of software products (source code) using a collaborative, interactive facility.

3. Background Information

   a. <u>What is the problem solved by your invention</u>?

      Code Inspections are an integral part of our software development processes. Currently, a static packet is created by the author or moderator assigned to the review which is distributed to all reviewers. After a suitable review period, a meeting is held where an assigned developer reads the code out loud and reviewers make comments and identify errors or problems. These are recorded by the assigned moderator and corrected by the author, completing the review process.

   b. <u>What techniques prior to your invention were used to perform the function of your invention</u>?

      1) Manual inspections -- generally on paper, in accordance with software development process guidelines.

      2)

   c. <u>What are the disadvantages of these prior techniques</u>?

      The review/inspection meeting(s) generally take a great deal of time, current inspection guidelines use a metric of 100-125 lines of code per hour of meeting with similar times required for preparation and correction times.

   d. <u>What are the advantages of your invention over the prior techniques</u>?

      On-line review, with collaborative collection of information should be much more efficient. Reviewers receive information from each other during the preparation process so the review meeting should be much shorter. Since the comments are available immediately, the author and moderator can agree on the clarity and correctness of most comments and eliminate the need for discussion.

Witness: _____

Date: _____

4. Detailed Description

a. <u>Detailed structural and functional operation</u>:

This process consists of three operations:

1. Preparing the WebReview for the item under consideration. This involves formatting the item to be inspected with unique identification of each element (i.e. source code line), gathering the elements of the item (i.e. source files) into a known location, and constructing the initially-empty collected comments.

2. Inspecting or reviewing the item under consideration. This involves two classes of activities:

   a. The collaborators examine, in detail, the item using the WebReview server and individual equipment (e.g. a web-browser). As comments, questions, and errors are noted by individuals, they provide their remarks to the WebReview server. These comments are then made available to all other collaborators, identified by the inspector and the item (e.g. source code file and line number) where they apply.

   b. The WebReview server provides the collaborators with the prepared elements of the item and accepts remarks from individuals. The remarks are gathered and provided to any collaborator on demand.

3. Executing the formal review meeting using products of the WebReview process. This uses the collective remarks entered during the review by all collaborators. The author and moderator will generally agree that some (usually most) of the remarks are clear and obvious and do not require additional information. Usually, a few remarks remain and a (brief) meeting among the collaborators is used to clarify and discuss the specific areas of concern.

b. <u>Are there alternative methods or different structural embodiments of your invention? Can the general idea or technique of your invention be extended to other related fields? How?</u>

Any collaborative facility could be employed in various means to execute a WebReview-like process. The advantages of WebReview are the centralized collection of information as it is generated to guide the collaboration and the persistence of information.

Witness: _____

Date: _____

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Similar current practices for document review involves distributing a "master copy" of a document which is then individually annotated and returned to the distributor. The distributor then collects the comments into a new version of the "master document" and may redistribute the new version for iterative review preparation. The advantages of the WebReview concept are the immediate availability of other's comments and the automation of the comment gathering and organization.

The general collaborative facility could be applied to any suitable item to be collectively inspected or reviewed by a group. The advantage of providing group comments during the individual preparation process is applicable to more than simply source code inspections. Any document which can be fully described using network facilities could be reviewed/inspected using similar facilities to the preferred embodiment given.

c. <u>Which features are believed to be new?</u>

The application of network-based information gathering and dissemination to the formal, structured process of inspection of source code is not known to be applied at this time.

d. <u>Set forth the preferred embodiment for your invention.</u>

There are two elements to the preferred embodiment of WebReview at this time.

1. The preparation facilities accept a collection of source code and generates formatted HTML pages with line numbers linked to a comment entry form. Also prepared is a table of contents for the entire source code file collection.

2. The collaboration facility consists of a Perl program executing as a CGI (Common Gateway Interface) extension to the Apache web server. As collaborators enter their comments into the remark entry form, the CGI data is passed to the Perl program which validates the form of information and records the remarks in the central review data store. Another element of the same CGI program provides for retrieval of previously stored information, possibly restricted to a particular file or set of files (inspection elements), a particular user's comments, both restrictions together, or all stored information at the collaborator's discretion. Each entered remark is hyper-linked to the specific item (prepared file and line number) to which it applies.

Witness: _____

Date: _____

INVENTION (INV) DISCLOSURE

INTELLECTUAL PROPERTY
DEPARTMENT (IPD)
SIEMENS CORPORATION
186 WOOD AVENUE SOUTH
ISELIN, NJ 08830

600

THIS SECTION FOR IPD USE ONLY

RECEIPT DATE STAMP

JUN

SIEMENS DOCKET NO. 2001E11527US

IP ATTORNEY FGM

INTE...

2001P 18375

1. **TITLE** WebReview -- Electronic Network collaborative inspection and review facility for software

2. **PURPOSE AND PROBABLE FIELD OF USE OF THE INVENTION**

This facility provides for collaborative inspection and review of source code using an HTTP server to provide access to several reviewers. Reviewers can comment, question, and identify errors in the reviewed code to the server. The server then distributes the collected information to all reviewers.

3. **PLANNED USE IN PRODUCTS: USE OUTSIDE COMPANY, DEMONSTRATION, DISCLOSURE, OR PUBLICATION OF THE INVENTION (GIVE DATES)**

This facility can be used immediately to improve efficiency of software development processes.

4. **LIST ALL WRITTEN DESCRIPTIONS OF THE INVENTION (E.G. DESCRIBED IN ENGINEERING NOTEBOOK NO. _____ PGS. _____)**

None, to date

5. **DATE(S) INVENTION WAS CONCEIVED** ___ Redacted _____ **DATE(S) INVENTION WAS EXPLAINED TO WITNESS(ES)**

WebReview was conceived and explained on or around Redacted (status to W. Howe—supervisor)

    DATE(S) EMBODIMENT(S) OF THE INVENTION WAS CONSTRUCTED

WebReview was developed over the period from Redacted to May 31, 2001.

    DATE(S) EMBODIMENT(S) OF THE INVENTION WAS TESTED

WebReview was demonstrated and applied informally by developers May 28, 2001 to May 31, 2001 (e-mail from Jeff Cripe to reviewers of source code)

    6.   ATTACHED IS A DETAILED DESCRIPTION COMPRISING ___2___ PAGES

6. **ATTACHED IS A DETAILED DESCRIPTION COMPRISING_____ PAGES**

7. **INVENTOR**	8. **CO-INVENTOR, IF ANY**
PERSONAL INFORMATION: Mr. [X] Mrs. [ ] Ms. [ ]	PERSONAL INFORMATION: Mr. [ ] Mrs. [ ] Ms. [ ]
FULL NAME Mark J. Flanagan	FULL NAME
ADDRESS 8735 Indian River Run	ADDRESS
Boynton Beach, Florida, 33437	
CITIZEN OF USA	CITIZEN OF
COMPANY INFORMATION:	COMPANY INFORMATION:
NAME Siemens Information & Communication Networks	NAME
DIVISION END Enterprise Switching Networks	DIVISION
ADDRESS 5500 Broken Sound Blvd.	ADDRESS
Boca Raton, FL, 33431	
TEL. NO. 561-923-1948	TEL. NO.
SOC.SEC.NO. Redacted	SOC.SEC.NO.
DATE 6/11/2001	DATE
SIGNATURE	SIGNATURE
	(Use an additional form for more co-inventors)
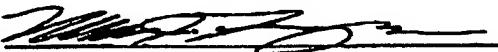
9. **WITNESS: Witnessed and understood by:**

NAME KRISTIN BUTCHER

TEL.NO. (954) 427-6628

DATE 6/1/01

SIGNATURE

COMPANY INFORMATION: (Same)

NAME

ADDRESS

Atty Dkt No.: 2001P18375US
Serial No.: 10/042,616

1

Invention Disclosure Form Supplement

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        process so the review meeting should be much shorter. Since the comments are
        available immediately, the author and moderator can agree on the clarity and
        correctness of most comments and eliminate the need for discussion.

Witness: _____

Date: 6/1/01

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Witness: _____

Date: __6 / 1 / 01__